## (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau

[WIPO]

[Bar Code]

(43) International Publication Date

November 10, 2005 (11/10/2005)

**PCT** 

(10) International Publication Number WO 2005/106255 A1

(51) International Patent Classification<sup>7</sup>:

International Application No.: PCT/EP2005/002458

International Filing Date: March 9, 2005 (03/09/2005)

Language in which the international application was originally filed: German

(26) Language in which the international application is published:

German

F15B 1/24

(30) Priority Data: 10 2004 018 456.9 April 16, 2004 (04/16/2004) DE

(71) Applicant (for all designated states except the U.S.): HYDAC TECHNOLOGY GMBH [DE/DE]; Industriegebiet, 66280 Sulzbach/Saar (DE).

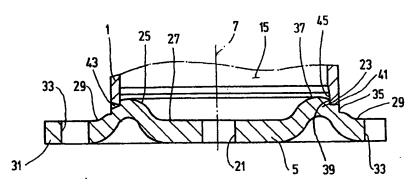
(72)

(75)Inventor/Applicant (U.S. only): WEBER, Norbert [DE/DE]; Mozartstrasse 5, 66280 Sulzbach/Saar (DE).

(74)Representative: BARTELS AND PARTNER; Lange Strasse 51, 70174 Stuttgart (DE).

Designated States (unless indicated otherwise, for each available type of national protective right): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, [continued on next page]

(54) Title: HYDRAULIC ACCUMULATOR



(57) Abstract: The invention relates to a hydraulic accumulator with an accumulator housing provided in the form of a tube (1), inside of which a separating element, preferably a separating piston (9), which can be displaced in the axial direction (7) of the tube, separates pressure chambers (13, 15) located on either side of the separating piston. In addition, the tube (1) is closed at at least one 📭 end by a cover-like closing part (5) having a contact surface for joining to the respective end edge of the tube (1). The contact surface has a flat part provided in the form of an annular surface (39), which projects inside the tube (1) and which serves to positively brace the tube wall against radial forces, and the contact surface has an annular surface (41), which extends in a radial direction and which serves to positively brace the tube wall against axial forces.

(57) Zusammenfassung: Bei einem Hydrospeicher mit einem Speichergehäuse in Form eines Rohres (1), in dem ein in dessen Axialrichtung (7) bewegbares Trennelement, vorzugsweise ein Trennkolben (9), beidseits an es angrenzende Druckräume (15) voneinander treunt, und bei dem das Rohr (1) an zumindest einem Ende durch ein deckelartiges Abschlußteil (5) abgeschlossen ist, das eine Anlagesläche für die Verbindung mit dem betreffenden Endrand des Rohres (1) aufweist, weist die Anlagesläche einen Flächenteil in Form einer axial ins Innere des Rohres (1) vorspringenden Ringfläche (39) zur formschlüssigen Abstützung der Rohrwand gegen Radialkräfte sowie eine eine Erstreckung in Radialrichtung aufweisende Ringfläche (41) zur formschlüssigen Abstittzung der Rohrwand gegen Axialkräfte auf.

Ŝ

- TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless indicated otherwise, for each available type of national protective right): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European Patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

## Published:

- With International Search Report.
- Prior to expiration of the time allowed for amendments of claims. Publication will be repeated if amendments are received.

Reference is made for an explanation of the two-letter codes and the other abbreviations to the Guidance Notes on Codes and Abbreviations in the front section of each regular PCT Gazette edition.